

TECHNOLOGY

Videochatting With Communists

As Cold War tensions came to a head, two men, working across the ocean from one another, became united in the quest to create conversations between Americans and Russians over the telephone lines.

By Julia Barton

November 3, 2014



Photos courtesy of Joel and Diane Schatz

In 1983 President Reagan dubbed the Soviet Union an "evil empire," but by the end of his first term, he was wondering if ordinary Russians and Americans couldn't resolve our nations's difference by just talking. At the end of a White House speech on January 16, 1984, Reagan imagined an American

couple, Jim and Sally, sheltering from a storm with Soviets Ivan and Anya. By some magic, there is no language barrier.

"Would they then debate the differences between their respective governments?" Reagan asked, rhetorically of course. "Or would they find themselves comparing notes about their children and what each other did for a living?"

Actually, we know what they would talk about: pizza. And Pepsi. And their hopes for goodwill among nations. We know this because by the end of the 80s, regular Soviets and Americans were talking to each other, through a strange and glitchy videophone. But the story of how those videophone calls happened in the first one is one full of risk, invention, and very strange characters.

Today, Americans have largely forgotten what it feels like to be isolated both by analog technology and geopolitics.

Even before Reagan's speech, the 1980s were the great era of longing for "ordinary" conversation between Russians and Americans. While governments held formal arms talks, many Soviets lived in closed cities or were, by law, supposed to seek official permission to speak with foreigners. Peace activists in the U.S. were itching for more contact, especially as our government ramped up its anti-Soviet rhetoric.

Today, Americans have largely forgotten what it feels like to be isolated both by analog technology and geopolitics. To peace activists on both sides of the Cold War divide, digital technology was the answer a stuck world was waiting for. What they lacked, the thinking went, was the means to communicate. And in some ways that was true.

All the telephone trunk lines between the U.S.S.R. and the U.S. went through Pittsburgh. And there were only 33 of them for the Soviet Union, a nation of close to 300 million. (By contrast, Costa Rica had some 600 circuits to the U.S. at that time). Calls between the U.S. and U.S.S.R. had to be scheduled days if not weeks in advance, and even then the quality was terrible. The operators caught a lot of flack.

Then suddenly, with satellite links and then the early Internet, that contact became theoretically possible. And two men, working across the ocean from one another, became united in the quest to make conversations between the two countries happen.

In the early 1980s, Joel Schatz was working as an energy advisor to the governor of Oregon. He found the Reagan administration's approach to the U.S.S.R. alarming. Schatz had Russian-born grandparents and resented the way the Cold War kept people of the two empires isolated from one another.

So, Schatz and his wife Diane decided to raise funds to travel to the U.S.S.R. as "citizen scouts." They left in late August 1983.

At the time, former KGB head Yuri Andropov held the U.S.S.R. in his sclerotic grip.

While Joel and Diane were in Moscow, the Soviets shot down Korean Air flight 007 over the Pacific, killing 269 people including a U.S. congressman. It was a grim time even for the grim pageant of the Cold War. But none of that mattered to the Schatzs' hope of using technology to bring Russians and Americans closer together, because through their interpreter, they'd met a man named Joseph Goldin.

Here it's perhaps best to quote Adam Hochchild's fantastic <u>Mother Jones</u> piece about the Schatzs and this unlikely Soviet man:

Joseph has no official connection to any institution, a fact that has apparently sometimes gotten him in trouble with the authorities. But clearly he is Joel's counterpart in the Soviet Union, another cultural repairman.

In a country where all professionals have business cards in the same format—last name, first name and patronymic, academic degree, title, address—Joseph has stationery showing a drawing of a man's head: The lower half is a face gazing at you intently, the top half is a partially completed, many-floored Tower of Babel. Around the edge of this head scrolls the Russian inscription: EXPEDITION TO HIDDEN HUMAN RESERVES.

"Hidden human reserves" were, in Goldin-speak, akin to the untapped "human potential" theories popular among New Age thinkers in the U.S. at the time. And indeed, Goldin was on the board of the <u>Esalen Institute</u> in Big Sur, a group that had tried to forge telepathic links with Soviets before satellite technology made the paranormal less of a first resort. With Goldin's wide, baby-ish face and staccato tumble of English, he enchanted many Americans in search of a free-thinking counterpart behind the Iron Curtain. Joel Schatz remembers thinking, "Here was someone we could work with."

Goldin believed that the people of the world needed more spontaneous contact. His dream, which he dubbed Mirror for Humanity, was to have huge screens in cities around the globe connected via satellite so people could peer at one another and strike up conversations (as with Reagan, language barriers seemed to be a minor problem for Goldin). Goldin was a utopian, not uncommon in a country steeped in the magical thinking of late-era Soviet Marxism. He saw spontaneous communication as a way to unleash the next era of human development.

Though Joel Schatz adored Goldin's utopian impulse, he had a more practical take. After his first experience trying to place a call from the U.S.S.R., Schatz had figured out that AT&T had the monopoly on calls to and from the United States. It was nearly impossible to make phone calls to the Soviet Union, without putting in a request, waiting for several days, and (at least on the U.S. side) paying an arm and a leg. Schatz thought this bottleneck was ridiculous, especially because it impeded ordinary communication between the citizenry of two nuclear superpowers. It being the 1980s, Schatz figured it was a problem that could be hacked with computers. There was just one problem: Schatz knew almost nothing about computers.

"We had friends in computers, and they recommended that we buy [one]," Schatz told me. He got a Radio Shack Tandy Model 80 "with little rubber cups to fit over the telephone earpiece and speaker. I was reading the manual on the plane [to Russia] to see how it worked," he recalls.

But Schatz turned out to be a very good hacker, just not of computers. His real triumph was hacking people, specifically people within the Soviet bureaucracy—which was, admittedly, starving for the chance to reverse engineer Western technology. Schatz seemed to understand instinctively that power in the U.S.S.R. basically flowed as in a high school, with a few influential cliques running the show. His new friend Joseph Goldin also knew this and had endeared himself to the scientific-academic clique, men who were necessary to the military but also a tiny bit mystical. Goldin introduced Schatz to Boris Rauschenbakh, the Soviet astronomer who'd managed to obtain the first images of the far side of the Moon.

As Schatz tells it, "I happened to have an audio cassette of Pink Floyd's 'Dark Side of the Moon' in my briefcase." He gave it to Rauschenbakh, who in return gave him the name of the right guy who could handle questions of proto-computing. Soon enough, Schatz was showing off his Model 80 computer to a group of powerful Soviet academics.

"These scientists looked at it as if it had been a space rock falling from heaven. They had never seen a device like this before," he says. Thanks to that meeting, Schatz had the contacts and clearance he needed to set up an email link to connect his office—now a nonprofit in San Francisco—with a place called Institute for Automated Systems in Moscow.

So Schatz could now send emails from his computer to Russians. But email was still rarely used in the mid-1980s. Schatz needed something more exciting to generate interest in his mission, and he got it with "slow-scan television" technology—a way of sending photo data, pixel by pixel, over voice telephone lines (at 3kHz—like a super-slow television signal). Doctors and scientists had been using the technology to transmit images to one another since the 1960s. Astronauts and cosmonauts used it to transmit images of what they saw in space. But it had rarely been used for conversational purposes, and never for citizen diplomacy.

Joseph Goldin first hit on the idea of attaching slow-scan images to ordinary, person-to-person communication in 1985. He left it up to Schatz to figure out how to obtain the equipment and bring it to the U.S.S.R.

Writer Adam Hochschild was present for most of this ordeal, and in his *Mother Jones* piece, he describes an extensive comedy of errors getting a borrowed slow-scan unit through Soviet customs and set up in a Moscow conference room, linked over ordinary telephone lines to technicians in Berkeley who try to transmit a human image.

Although vaguely recognizable as a human figure sitting in a chair, it looks as if black icicles were dripping down from the top of the screen, and as if the whole thing were viewed through a web of herringbones.

Joel explains the problem on the phone, and then says, "Okay, now I'm going to send you something." He aims the video camera at a painting on the wall, and pushes the button. "Can you recognize this guy?"

Thirty seconds later comes a voice from Berkeley: "Lenin!" A buzz of excited whispering in Russian runs around the roomful of Soviet bureaucrats. A visual image from this room has just traveled almost halfway 'round the world, over the phone. Several of the men stand up, to get a better view of the TV.

Suddenly seeing and talking to faraway people was sexy, but also easily within reach, even if the picture quality wasn't the greatest. Finally, Schatz and Goldin were ready to bring it to the world. Like the shrewd promoters they were, they started off with media stunts: New Years' toasts between poets and musicians at midnight in Moscow, noon in San Francisco. Soon they were linking all kinds of small groups across the Cold War divide: maternity ward nurses and doctors, members of Alcoholics Anonymous. Diane Schatz, an artist herself, linked up cartoonists. And in 1987, the three amateur diplomats had a stroke of genius: connecting the telephone operators who handled the calls between the U.S. and U.S.S.R.

So, on October 9 of that year operators at AT&T's International Operating Center in Pittsburgh sat down in a windowless room to talk with their counterparts at the U.S.S.R.'s International Telephone Exchange in Moscow. Here is footage from that meeting. (The full video, recorded onto a betamax, is about 40 minutes long. We've edited it down to a few choice selections)

You can see Joel and Diane in the foreground at the table where the American operators had gathered (we do not have film of the Soviet side). Diane, with smooth hair and dangling earrings, talks continuously into a white receiver linked to Moscow. Her husband Joel, Lennon to her Yoko with a bushy beard and round glasses, fiddles with a large Apple PC and points a camera to the operators around the table.

Schatz has hooked all this up to two direct connections between Moscow and Pittsburgh—copper wires strung across land and sea. (Newly installed trans-Atlantic fiber-optic cables had not yet gone online.) Moscow telephones still operated on tsarist-era, un-insulated, copper wires. Schatz and the technicians in Moscow connected their computers to this copper-based technology with alligator clips.

And yet remarkably, they were able to transmit pictures back and forth across the wires—pictures of the operators as they talk. And they wanted to talk about what they do on their breaks.

One American operator positions herself beneath a banner strung up in the conference room: It says "HELLO NEW FRIENDS" in Russian.

Someone has grabbed bottles of soda and a frozen pizza. "Do you have pizza in Russia?" the woman asks. "Hello?"

The answer comes quickly, from a male voice with a Russian-tinged British accent. "Well, no pizza yet!" It's not clear if he means they haven't tried pizza in the U.S.S.R., or they haven't gotten the image yet. It makes its way through the wire line by line to be reconstructed on a TV screen in the distant northern city. After a few seconds, the man reacts: "Oh, beautiful pizza!" Everyone laughs.

In response, one of the supervisors in Moscow has her daughter play a song on the guitar. It is a little sad and clunky, her guitar out of tune. The Pittsburgh operators listen politely. The Soviet operators have many formal speeches to make.

"Hello," says one operator named Svetlana. "I am very happy finally to have this rare opportunity not only to hear but to see my counterparts in America. And I very much hope that today's contact will continue and deepen our acquaintance. I hope we will have more sessions like this in the future."

After that exchange, the AT&T operators gave his scrappy startup second priority in line for calls to and from the U.S.S.R. First in line? The U.S. State Department.

Around this same time, Schatz got funding from George Soros, the Hungarian-born hedge-fund manager who supported dissidents in the Eastern bloc. Soros helped Schatz turn his Internet and slow-scan link to the United States into a for-profit business called <u>SovAmTeleport</u>, splitting the proceeds 50/50 with the Soviet government, which was opening itself to joint ventures everywhere by this point. The fees for SovAm's transmission and translation services look steep to us now—more than \$1600 in today's dollars to set up a data account, plus a \$330 monthly fee—but there were plenty of customers on the U.S. side eager to pay for a solid link to counterparts in the U.S.S.R.

This was the real beginning of Schatz's big business. To capitalize on his new connections, Schatz established permanent offices in Moscow and St. Petersburg, hired his first employees, and also began looking at ways to break the AT&T monopoly on telephone connections to the U.S.S.R.

It's clear how the Internet blew the minds of those few Soviets privileged enough to access it.

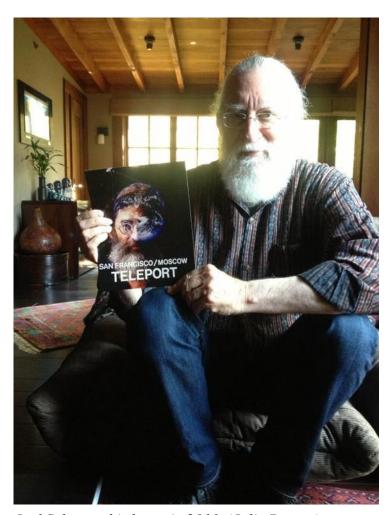
Schatz's first Russian employee was a 25-year-old named Andrei Kolesnikov, who had been running the hulking computers for a factory in Moscow. Talking with him now, it's clear how completely the Internet blew the minds of those few Soviets privileged enough to access it. Kolesnikov remembers sitting in Schatz's Moscow apartment, looking at his Apple PC, stunned that it could be linked not only to Schatz's office in San Francisco, but with computers around the globe.

This was his first glimpse of Usenet.

"It was a big, big thing for any person at that time," Kolesnikov says. "But for me it was kind of double- shock because I was just a Soviet guy from the factory!"

In August 1991, hardline Communists deposed Soviet Premier Mikhail Gorbachev and declared themselves head of a new government. For three days, the U.S.S.R. had almost no telephone contact with the outside world. But SovAm was able to fly under the radar and keep sending out news from its clients, which now included major Western media. Kolesnikov didn't sleep for 72 hours.

The coup was routed and six months later, the Soviet Union had dissolved into 15 pieces. Joel Schatz was suddenly a telecom mogul in a new country—the Russian Federation—a country now desperate to join the world. He continued traveling back and forth to Russia as SovAm Teleport became GTS, which spun off into something called Golden Telecom, which eventually merged with VimpelCom, now the seventh-largest mobile carrier in the world. In Russia and many former Soviet republics, VimpelCom sells its services under the brand BeeLine. In 2012, VimpelCon pulled in \$23.1 billion in revenue.



Joel Schatz at his home in 2011. (Julia Barton)

The Schatzs sold their shares in GTS in the early 2000s, but their involvement in the booming Russian telecom market clearly made them wealthy. They now live in a Japanese-style mansion atop a hill in Marin County, surrounded by fountains and manicured landscaping.

They talk about their Russia experience as a wild ride they simply jumped on for a time. Their former employee, Andrei Kolesnikov, is now in charge of <u>Coordination Center</u>, the top-level domain name service for Russia's Internet. And he agrees that the Schatzs were simply in the right place at the right time.

"I believe in Karl Marx," Kolesnikov says wryly. "If there was no Joel, there would be someone else. This was just part of the historical transformation."

But while the Schatzs got rich off the transformation, it was not as kind to Joseph Goldin. In the 1990s, he spent three years living in San Francisco with the Schatzs, trying constantly to convince people of his scheme for giant TV screens connecting the globe. But after the Cold War, Americans quickly lost interest in all things Russian. Goldin's last accomplishment was a worldwide sing-along of Beethoven's "Ode to Joy" at the opening of the 1998 Nagano Winter Olympics. It's moving to watch, and you can see and hear Goldin's fantastic dream for humanity as whole stadia of people take up the chorus around the world.

Soon after that, Goldin died of a heart attack. The few Russian newspapers that noticed reported that he was trying to organize a "spacebridge" between Chechens and Russians, who were then killing each other at a rapid pace.

Good cross-cultural communication is more than just talking—it's work.

In his vast house, Joel Schatz still keeps up with the news from Russia, bewildered by its recent bender of anti-American hatred and Internet censorship. Clearly now, the problem is not that people don't have the means to communicate—they can talk to (and troll) one another all day if they wish. But good cross-cultural communication is more than just talking—it's work. A "natural" conversation between strangers with different upbringings involves a massive amount of discomfort, especially for Americans who are not often pushed out of their zones in this way. I speak decent Russian and have been traveling back and forth to the former Soviet world for three decades now, and I'm still not good at it.

Listening back, I'm haunted by the many lofty speeches the Soviet operators made in that 1987 exchange. This, for Soviets then and even for many Russians now, is the culturally appropriate thing one does in a first meeting with foreigners. It clearly confused the American operators, who thought they were there to talk about their kids and pizza. The thought of orating over a phone about the friendship of mankind would've been as ridiculous to them then as it is to me now, but it probably would have sent a cue of "normal behavior" to the Soviet side.

The Soviet operators said they hoped their new off-hours contact with Americans would continue, but AT&T apparently did not think the effort was worth it. As far as Schatz knows, no other video-calls were made between the two groups.

Joel Schatz and Joseph Goldin were among the many tech visionaries who foresaw the end of analog isolation. But American awareness of foreign cultural cues is still pretty much the same it was in the 1980s. In fact, these late Cold War exchanges with Russians seem to be a high point of American interest in really engaging with people of another nation.

But if Russian leaders turn back the clock to pseudo-Soviet threat-mongering and isolation—a model that seems to be their default endgame—things might get so bad that Americans may again need to take an awkward turn as citizen diplomats. Next time, though, it won't be the technology or the talking that is the challenge. The hard part will be, as it always has been, listening and understanding what the other side is saying.